3. Polyvinyl Chloride (PVC) shall conform to the requirements of ASTM D-3034 Standard Specifications for the PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings, SDR-35.

4. Storm sewers 18" in diameter or smaller shall be ASTM C-14.

5. Storm sewers 21" in diameter or larger shall be ASTM C-76, Class II. 6. All storm sewer pipe under pavement, regardless of size, shall be reinforced concrete pipe (ASTM C-76, Class III) unless noted otherwise

7. Corrugated metal pipe shall conform to the standard specifications for corrugated culvert pipe M-36, A.A.S.H.T.O. See plans for gauge.

8. All filled places under proposed roads, proposed sanitary and storm sewer lines, and/or paved areas including trench backfills shall be compacted to 95% of maximum density as determined by the "Modified AASHTO T-180 Compaction Test" or 100% of maximum density as determined by the Standard Proctor Test AASHTO T-99. All filled placed in proposed roads shall be compacted from the bottom of the fill up. All tests shall be verified by a soils engineer concurrent with grading and backfilling operations. Ensure the moisture content of the soil in fill areas is to correspond to the compactive effort as defined by the Standard or Modified Proctor Test. Optimum moisture content shall be determined using the same test that was used for compaction. Soil compaction curves shall be submitted to the City of O'Fallon prior to the placement of fill. Proof rolling may be required to verify sail stability at the discretion of the City of O'Fallon.

9. All earthen filled places within State, County, or City roads (Highways) shall be compacted to 100% of maximum density as determined by the "Standard Proctor Test A.A.S.H.T.O. T-99" (ASTM D-698) unless otherwise specified by local governing authority specifications. All tests will be verified by a soils engineer.

10. Easements shall be provided for storm sewers, sanitary sewers, and all utilities on the record plat. See record plat for location and size of easements. This does not apply to house laterals.

11. No area shall be cleared without the permission of the developer.

12. All grades shall be within 0.10 feet (more or less) of those shown on the grading plan.

13. No slope shall be steeper than 3' (horizontal) to 1' (vertical).

14. Hazard markers will consist of three (3) standard specification, "Manual on Uniform Traffic Control Devices," end of roadway markers mounted on two (2) pound "U" channel sign post. Each marker shall consist of an eighteen (18) inch diamond reflectorized red panel. The bottom of each panel shall be mounted a minimum of four (4) feet above the elevation of the pavement surface.

15. All manhole and curb inlet tops built without elevations furnished by the Engineer will be the responsibility of the sewer contractor. At the time of construction stakeout of the sewer lines, all curb and grate inlets will be face staked. If normal face stakes fall in line with sewer construction, the Engineer will set these stakes on a double offset. It shall be the responsibility of the sewer contractor to preserve all face stakes from destruction.

16. All standard street curb inlets to have front of inlet 2 feet behind

17. Water lines, valves, sleeves, meters and etc., shall meet all specifications and installation requirements of the local governing authority. Water mains shall have a minimum of 42" of cover.

18. All cast iron pipe for water mains shall conform to A.W.W.A. specification C-106 and/or C-108. The cast Iron fittings shall conform to A.W.W.A. specification C-110. All rubber gasket joints for water cast iron pressure pipe and fittings shall conform to A.W.W.A. specification C-111.

19. All water hydrants and valves shall be cast iron and installed in accordance with plans and details.

20. All sanitary and storm sewers shall meet all specifications and installation requirements of the local governing authority.

21. All PVC water pipe shall have a minimum pressure rating of PR-200 or

SDR-21. All new utilities under City streets shall be bored. 22. All grading on Missouri State Highway Right-of-Way shall be seeded and mulched and all disturbed right-of-way markers shall be reset at

23. All sanitary service lines shall have a 6" diameter. Sanitary mains shall have minimum 8" diameter.

24. Manhole frame and cover shall be Clay and Bailey No. 2008 or Neenah R-1736 or Deeter 1315 or approved equal.

adhesive pads will not be allowed.

25. Provide a marking on the storm sewer inlets. The City will allow the following markers and adhesive procedures only as shown in the table below or an approved equal by Almtek Industries. 'Peel and stick'

14. Manufacturer	15. Size	16. Adhesive	17. Style	18. Message (Part #)	19. Website
20. ACP International	21. 3-7/8"	22. Ероху	23. Crystal Cap	24. No Dumping Drains To waterways (SD-W-CC)	25. www.acpinterna tional.com
26. DAS Manufacturing, Inc.		28. Ероху	Style	30. No Dumping Drains To Stream (#SDS)	31. www.dasmanufo cturing.com

26. The City of O'Fallon shall be notified at least 48 hours prior to

27. Brick shall not be used on in the construction of sanitary or storm

construction of sanitary sewers for coordination and inspection.

28. 5/8" diameter trash bars shall be provided for all inlets.

29. All concrete pipe or ADS N-12 pipe shall be installed with "O-Ring" Rubber type gaskets per M.S.D. standard construction specifications or

30. The contractor shall assume complete responsibility for controlling all siltation and erosion of the project area. The contractor shall use whatever means necessary to control erosion and siltation including, but not limited to, staked straw bales and/or siltation fabric fences (possible methods of control are detailed in the plan). Control shall commence with grading and be maintained throughout the project until acceptance of the work by the Owner and/ or the City of O'Fallon and/ or MoDOT. The contractor's responsibilities include all design and implementation as required to prevent erosion and the depositing of silt. The Owner and/ or the City of O'Fallon and/ or MoDOT may at their option direct the Contractor in his methods as deemed fit to protect property and imrovements. Any depositing of silts or mud on new or existing pavement or in new or existing storm sewers or swales shall be removed after each rain and affected areas cleaned to the satisfaction of the Owner and/or the City of O'Fallon and/ or MoDOT.

31. Developer must supply City construction inspectors with soils reports prior to or during site soil testing.

32. All paving to be in accordance with St. Charles County standards and specifications except as modified by the City of O'Fallon ordinances.

33. Owner shall provide a copy of the soils report to grading contractor. Contractor shall be responsible for adhering to all recommendations outline in the soils report.

34. All new utilities under City streets shall be bored.

35. All sanitary laterals and sanitary mains crossing under roadways must have the proper rock backfill and to required compaction.

36. HDPE pipe is to be N-12WT or equal and shall meet ASTM F1417 water tight field test.

37. Trees, organic debris, rubble, foundations and other deleterious material shall be removed from the site and disposed of in compliance with all applicable laws and regulations. Landfill tickets for such disposal shall be maintained on file by the developer. Burning on site shall be allowed only by permit from the local fire district. If a burn pit is proposed the location and mitigation shall be shown on the grading plan and documented by the soils engineer.

38. If intersecting roadway does not have a curb, then the curb on the new entrance shall begin 10' from the edge of the existing roadway

39. Project is Served By: WATER

- CITY OF O'FALLON - O'FALLON SEWER DISTRICT AMERENUE - CENTURYTEL TELEPHONE COMPANY

- LACLEDE GAS - O'FALLON FIRE PROTECTION DISTRICT SCHOOL DISTRICT - FRANCIS HOWELL SCHOOL DISTRICT

All utilities shall be located underground.

40. Site is not located within the 100 year flood plain per FIRM Map

41. All grading for this development shall conform to the specifications in the soils report for this development.

42. The developer shall contract with a soil consultant firm registered in the State of Missouri during the grading operation to monitor cut and fills and to verify proper compaction has been achieved. A report shall be prepared by the soils consultant and provided to the City for verification of the grading operation.

43. All pipe joints shall be gasketed O-ring type.

44. Connection at all sanitary and storm structure to be made with A-lock joint or equal.

45. Sidewalks; curb ramps, ramp and accessible parking spaces shall be constructed in accordance with the current approved "American with Disabilities Act Accessibility Guidelines: (ADAAG) along with the required grades, construction materials, specifications and signage. If any conflict occurs between the above information and the plans, the ADAAG guidelines shall take precedence and the contractor prior to any construction shall notify the Project Engineer.

46. All sign post and backs and bracket arms shall be painted black using Carboline Rustband Penetrating sealer SG and Carboline 133 HB paint (or equivalent as approved by City and MoDOT). Signs designating street name shall be on the opposite side of the street from traffic

47. Graded areas that are to remain bare for over 2 weeks are seeded

48. Erosion control systems are inspected and necessary corrections made within 24 hours of any rainstorm resulting in an-half inch of rain or

49. Treffic control is to be per MoDOT or MUTCD whichever is most

50. Developer must supply City construction inspectors with soil reports prior to or during site soil testing." The soil report will be required to contain the following information on soil test curves (Proctor reports) for projects within the City:

 Optimum moisture content Maximura and minimum allowable maisture content Curve must be plotted to show density from a minimum of 95% Compaction and above as determined by the 'Modified ASASHTO T-180 Compaction Test" (A.S.T.M.-D-1157) or from a minimum of 100% as determined by the "Standard Proctor Test ASSHTO T-99, Method C" (A.S.T.M.-D-698). Proctor type must be designated on document. Curve must have at least 5 density points with moisture content and

sample locations listed on document Specific gravity Natural moisture content

e Liquid limit · Plastic Limit

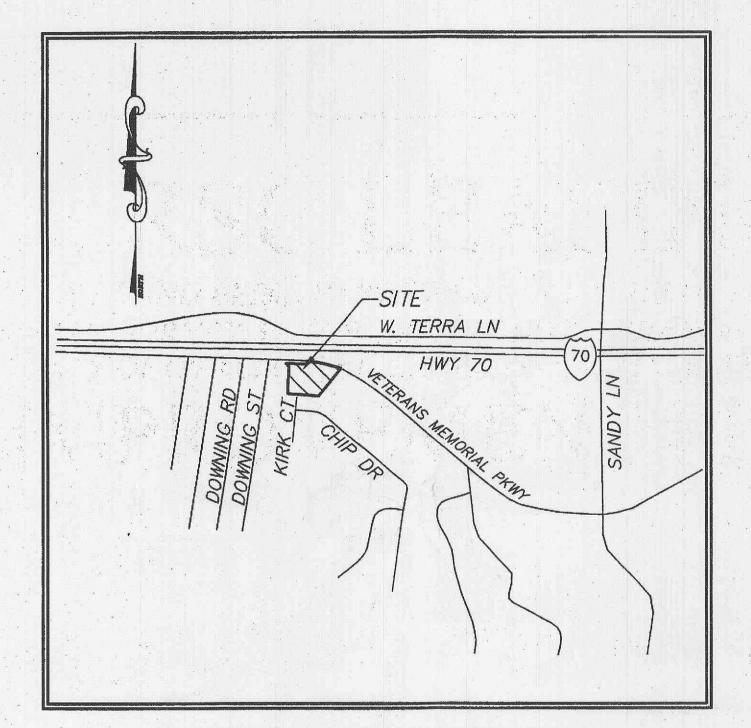
• Be advised that if this information is not provided to the City's Construction inspector the city will not allow grading or construction activities to proceed on any project site.

51. All light poles are to be located within landscaped islands.

# RSCLEASING

A TRACT OF LAND BEING PART OF LOT 6 OF D. HEALD HOMES PLACE IN U.S. SURVEY 55, TOWNSHIP 47 NORTH, RANGE 3 EAST, CITY OF O'FALLON, ST. CHARLES COUNTY, MISSOURI

## IMPROVEMENT PLANS



LOCATION MAP N.T.S.

#### CITY OF O'FALLON CONTINGENCIES

1. SHOULD THE CONDITIONAL USE CEASE OPERATIONS FOR A PERIOD OF (1) YEAR THE CUP SHALL BE REVOKED. 2. NO EQUIPMENT OR EQUIPMENT PARTS SHALL BE WORKED ON OUTSIDE OF 3. EQUIPMENT DISPLAYED FOR SALE OR LEASE IN ASSOCIATION WITH THIS BUSINESS SHALL NOT BE STORED BETWEEN THE FRONT FACE OF THE BUILDING AND THE EAST PROPERTY LINE OR WITHIN THE BUFFERYARD. 4. NO STORAGE OF PARTS OR PRODUCTS WILL BE PERMITTED OUTSIDE OF 5. NO LOADING OR UNLOADING OF EQUIPMENT SHALL OCCUR WITHIN ANY PUBLIC RIGHT-OF-WAY. 6. NO EQUIPMENT DISPLAYS MAY EXCEED THE HEIGHT OF THE EXISTING

## DRAWING INDEX

Description **COVER SHEET EXISTING CONDITIONS** 

**DEMOLITION PLAN** 

SITE PLAN

**GRADING PLAN** DRAINAGE AREA MAP

CONSTRUCTION DETAILS

### LEGEND

-	Sanitary Sewer (Proposed)	(N.H.) 20)	Sanitary Structure	R.C.P.	Reinforced Concrete Pipe
	Sanitary Sewer (Existing)	(GI)	Storm Structure	C.M.P.	Corrugated Metal Pipe
	-Storm Sewer (Proposed)	0	Test Hole	C.I.P.	Cast Iron Pipe
	=Storm Sewer (Existing)	വ	Power Pole	P.V.C.	Polyvinyl Chloride
— <i>в</i> *w—	Water Line & Size	8-8	Light Standard	V.C.P.	Vitrified Clay Pipe
—EX W—	Existing water line	00	Double Water Meter Setting		
<del> </del> ₩	Tee & Valve	8	Single Water Meter Setting	C.O.	Clean Out
*	Hydrant	C.I.	Curb Inlet	V.T.	Vent Trap
E	Сар	S.C.I.	Skewed Curb Inlet	T.B.R.	To Be Removed
18	Lot or Building Number	D.C.I	Double Curb Inlet	T.B.R.&R	
x	Existing Fence Line	G.I.	Grate Inlet	T.B.P.	To Be Protected
سسس	Existing Tree Line	A.I.	Area Inlet	T.B.A.	To Be Abondoned
<u>s </u>	Street Sign	D.A.I.	Double Area Inlet	B.C.	Base Of Curb
	Existing Contour	C.C.	Concrete Collar	T.C.	Top Of Curb
<u></u>	Proposed Contour	F.E.	Flored End Section	T. W.	Top Of Wall
	Grouted Rip—Rap	E.P.	End Pipe	B. W.	Base Of Wall
	End of Lateral	E.D.	Energy Dissipator	(TYP)	Typical
	Asphalt Pavement	M.H.	Manhole	U.N.O.	Unless Noted Otherwise
	Concrete Pavement	C.P.	Concrete Pipe	U.I.P.	Use in Place
			OLTV	OF OFAI	1 011

"Little MO" says

CITY OF O'FALLON COMMUNITY DEVELOPMENT DEPARTMENT ACCEPTED FOR CONSTRUCTION PROFESSIONAL ENGINEER'S SEAL INDICATES RESPONSIBILITY FOR DESIGN

#### BENCH MARKS

BM: RM 66 Cross cut on the west bolt of a fire hydrant located at the northeast corner of Mill Pond Drove and Spring Hill Drive.

ELEVATION = 581.74

TBM: "M" in Mueller on fire hydrant along the north side of this site, 16'± east of the entrance. ELEVATION = 603.09

Planning Department File #- 1908.03 cond. use Planning Department File #- 1908.04 site plan Approved by Planning and Zoning-Nov. 6, 2008

NOT APPROVED FOR CONSTRUCTION

OF C Capyright 2009 by Pickett, Ray & Silver Inc

ENGINEERS AUTHENTICATION

and date hereunder attached.

The responsibility for professional

engineering liability on this project is hereby limited to the set of plans

authenticated by the seal, signature,

RICKETO TRAVER SILVER, INC

DATE

FIELD

BOOK

01-09-09

01-09-09

Responsibility is disclaimed for all

other engineering plans involved in this project and specifically excludes

revisions after this date unless

reguthenticated!!!!

DRAWN

CHECKED

D.STOSZ

TASK # 4

PROJECT # 99203.OMTL.00C

RSC LEASING

IMPROVEMENT PLANS

COVER SHEET

Underground utilities and structures have been plotted from available information and therefore, their location must be considered approximate only. It is the responsibility of the individual contractors to notify the utility companies before actual construction.

Blog Inspector RECEIVED MAR 8 1 2009

Civil Engineers Planners

Land Surveyors

333 Mid Rivers Mall Dr. St. Peters, MO 63376

FAX 397-1104

PICKETT RAY & SILVER